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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/686,791	10/16/2003	Kurt E. Heikkila	A202 1490	7940

7590 01/25/2006  
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EXAMINER

ROSSI, JESSICA

ART UNIT PAPER NUMBER

1733

DATE MAILED: 01/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/686,791

Applicant(s)

HEIKKILA, KURT E.

Examiner

Jessica L. Rossi

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12/23/05, RCE.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 4-17, 31, 35 and 36 is/are pending in the application.
- 4a) Of the above claim(s) 17, 31, 35 and 36 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 4-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***RCE***

1. The request filed on 12/23/05 for a RCE under 37 CFR 1.114 based on parent Application No. 10/686,791 is acceptable and a RCE has been established. An action on the RCE follows.

***Response to Amendment***

2. This action is in response to the amendment dated 11/14/05. Claims 18-30 and 32-34 were cancelled. Claims 4-17, 31 and 35-36 are pending but claims 17, 31 and 35-36 remain withdrawn from further consideration.

3. Support for the limitations added to claim 4 is found on p. 6-7 and 12 of the specification.

4. The rejection of claim 4 under 35 USC 103(a) as being unpatentable over Guhl (US 6055783) in view of Lautenschlaeger (US 5234730), or alternatively, Lautenschlaeger in view of Guhl, as set forth in paragraph 6 of the previous action has been withdrawn in light of the present amendment and the discovery of better prior art.

5. The rejection of claim 4 under 35 USC 103(a) as being unpatentable over Crandell (US 6886297) in view of Lautenschlaeger, or alternatively, Lautenschlaeger in view of Crandell, as set forth in paragraph 8 of the previous action has been withdrawn in light of the present amendment and the discovery of better prior art.

***Claim Objections***

6. Claims 31 and 35-36 are objected to because of the following informalities: these claims depend from claims that have been cancelled. The examiner appreciates that these claims are withdrawn, but it is suggested to cancel these claims.

***Claim Rejections - 35 USC § 103***

7. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

8. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Guhl (US 6260251, of record), the prior art cited by Sigafos (US 6615890), and further in view of the collective teachings of Futhey et al. (US 5840407, of record) and Pitzen et al. (US 6811848, of record).

\*The examiner would like to note that claim 4 is directed to one of two species disclosed in the present specification where the dual state adhesive is put into a non-adhesive state by a blocking agent which then dissipates to trigger the adhesive state of the adhesive (p. 4, line 24 – p. 5, line 7). It is also noted that the adhesive can be a foamed-backed double-sided pressure-sensitive adhesive tape (p. 5, lines 22-25) and the blocking agent can be an alcohol (p. 6, lines 12-15).

With respect to claim 4, Guhl teaches a method of assembling a groove glazed window component wherein at least one grooved lineal is applied to an edge portion of a glass unit (glazing) by applying a sealant to at least one of the spaced apart walls of the groove and urging the edge portion of the glass unit into the groove to bond and seal the glass unit within the groove (column 5, lines 22-34).

The reference is silent as to the exposed surface of the sealant bearing a dual state adhesive, applying a temporary adhesion blocker to the dual state adhesive to place the adhesive in a first substantially non-adhesive state, urging the edge portion of the glass unit into the groove while the dual state adhesive is in this non-adhesive state, such that the edge portion of

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the glass unit contacts and slides across the dual state adhesive, and allowing the temporary adhesion blocker to dissipate thereby placing the dual state adhesive in a second substantially adhesive state.

The reference does not disclose or suggest any particular sealant to be used in the method and therefore one reading the reference as a whole would have appreciated that such is not critical to the invention. It is known in the window art to bond and seal a glass unit within a frame or sash by placing a foam-backed double-sided pressure-sensitive adhesive tape onto a wall of the frame or sash and then bonding and sealing the glass unit to the sealant, as taught by the prior art of Sigafos (column 1, lines 13-30). Therefore, it would have been obvious to use a foam-backed double-sided pressure-sensitive adhesive tape for the sealant of Guhl because such is known in the art, as taught by the prior art of Sigafos, where such a pre-formed sealant allows for easy storage and handling.

Guhl acknowledges that during groove glaze construction sealant may be pushed aside by the edge of the glass unit as the grooved lineals are assembled to form the sash frame (column 5, lines 35-38). It is known in the glass/window art to apply a temporary adhesion blocking agent (i.e. water and/or alcohol and/or detergent solution) onto the exposed surface of a pressure-sensitive adhesive and/or glass substrate before contacting the adhesive and glass where the solution serves as a lubricant which allows the glass to slide across the exposed surface of the adhesive and be accurately positioned thereon before the temporary adhesion blocker dissipates and bonding between the adhesive and glass takes place, as taught by the collective teachings of Futhey (column 1, lines 14-15; column 3, lines 63-65; column 7, lines 35-54) and Pitzen (column 6, lines 29-30; column 7, line 60 – column 8, line 18).

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One skilled in the art would have appreciated that the problem acknowledged by Guhl is due to the fact that the tackiness of the sealant creates friction between the sealant and glass unit, which causes the sealant to be pushed aside by the glass unit. Therefore, it would have been obvious to the skilled artisan to overcome this problem by applying a temporary adhesion blocker to the exposed surface of the pressure-sensitive adhesive of Guhl in view of the prior art of Sigafoes to place the adhesive in a first substantially non-adhesive state so that the glass unit will slide across the adhesive, instead of pushing it aside, when the glass unit is urged into the groove and then bonding and sealing the glass unit within the groove upon dissipation of the adhesion blocker because such a technique for eliminating friction between a pressure-sensitive adhesive and glass surface is known in the glass/window art, as taught by the collective teachings of Futhey and Pitzen.

9. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Guhl '251, Sigafoes, and the collective teachings of Futhey and Pitzen as applied to claim 4 above and further in view of the prior art cited by Guhl et al. (US 6055783, of record).

If it is not taken that the grooved lineal of Guhl '251 would have spaced apart walls onto which the sealant would be applied for bonding of the glass unit within the grooved lineal, such a configuration would have been obvious since it is well-known and conventional in the art of grooved glaze construction, as taught by the prior art of Guhl '783 (Figure 2; column 1, lines 40-41).

10. Claims 5-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Guhl '251, the prior art of Sigafoes, and the collective teachings of Futhey and Pitzen as applied to claim 4 above, and further in view of Crandell (US 6886297, of record).

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Regarding claim 5, Guhl '251 teaches urging a plurality of grooved lineals onto the edges of the glass unit but is silent as to this taking place substantially concurrently. It would have been obvious to the skilled artisan to urge the lineals onto the edges of the glass unit substantially concurrently because such is known in the art, as taught by Crandell (Figures 4a-d; column 5, line 64 – column 6, line 10).

Regarding claims 6-14, Guhl teaches such (column 3, lines 35-36; column 5, lines 1-3; column 9, lines 10-33).

Regarding claims 15-16, the skilled artisan would have appreciated that bowing of the mid portions would be a result of the amount of pressure applied during the urging of the lineals onto the glass unit wherein an amount of pressure sufficient to cause such bowing is well within the purview of the skilled artisan so as to ensure that the edges of the glass unit are secured within the grooves of the lineals.

11. Claims 5-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Guhl '251, the prior art of Sigafos, the collective teachings of Futhey and Pitzen, and also the prior art of Guhl '783 as applied to claim 4 above, and further in view of Crandell.

Please see paragraph 10 above.

12. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over the prior art cited by Guhl '783 in view of Guhl '251, the prior art cited by Sigafos and further in view of the collective teachings of Futhey and Pitzen.

With respect to claim 4, Applicant is directed to paragraphs 8 and 9 above for a complete discussion of the references. The prior art of Guhl '783 is silent as to the sealant being applied to the walls of the lineal before the glass unit is placed therein, the exposed surface of the sealant

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bearing a dual state adhesive, applying a temporary adhesion blocker to the dual state adhesive to place the adhesive in a first substantially non-adhesive state, urging the edge portion of the glass unit into the groove while the dual state adhesive is in this non-adhesive state, such that the edge portion of the glass unit contacts and slides across the dual state adhesive, and allowing the temporary adhesion blocker to dissipate thereby placing the dual state adhesive in a second substantially adhesive state.

It would have been obvious to apply the sealant to the walls of the lineal of Guhl '783 before inserting the glass unit because such a technique, which is called groove glazed construction, is known in the art as taught by Guhl '251.

The prior art of Guhl '783 does not disclose or suggest any particular sealant to be used in the method and therefore one reading the reference as a whole would have appreciated that such is not critical to the invention. It is known in the window art to bond and seal a glass unit within a frame or sash by placing a foam-backed double-sided pressure-sensitive adhesive tape onto a wall of the frame or sash and then bonding and sealing the glass unit to the sealant, as taught by the prior art of Sigafos (column 1, lines 13-30). Therefore, it would have been obvious to use a foam-backed double-sided pressure-sensitive adhesive tape for the sealant of Guhl because such is known in the art, as taught by the prior art of Sigafos, where such a pre-formed sealant allows for easy storage and handling.

Guhl '251 acknowledges that during groove glaze construction sealant may be pushed aside by the edge of the glass unit as the grooved lineals are assembled to form the sash frame (column 5, lines 35-38). It is known in the glass/window art to apply a temporary adhesion blocking agent (i.e. water and/or alcohol and/or detergent solution) onto the exposed surface of a



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pressure-sensitive adhesive and/or glass substrate before contacting the adhesive and glass where the solution serves as a lubricant which allows the glass to slide across the exposed surface of the adhesive and be accurately positioned thereon before the temporary adhesion blocker dissipates and bonding between the adhesive and glass takes place, as taught by the collective teachings of Futhey (column 1, lines 14-15; column 3, lines 63-65; column 7, lines 35-54) and Pitzen (column 6, lines 29-30; column 7, line 60 – column 8, line 18).

One skilled in the art would have appreciated that the problem acknowledged by Guhl is due to the fact that the tackiness of the sealant creates friction between the sealant and glass unit, which causes the sealant to be pushed aside by the glass unit. Therefore, it would have been obvious to the skilled artisan to overcome this problem by applying a temporary adhesion blocker to the exposed surface of the pressure-sensitive adhesive of Guhl '783 in view of Guhl '251 and the prior art of Sigafos to place the adhesive in a first substantially non-adhesive state so that the glass unit will slide across the adhesive, instead of pushing it aside, when the glass unit is urged into the groove and then bonding and sealing the glass unit within the groove upon dissipation of the adhesion blocker because such a technique for eliminating friction between a pressure-sensitive adhesive and glass surface is known in the glass/window art, as taught by the collective teachings of Futhey and Pitzen.

13. Claims 5-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over the prior art of Guhl '783, Guhl '251, the prior art of Sigafos, and the collective teachings of Futhey and Pitzen as applied to claim 4 above, and further in view of Crandell.

Regarding claim 5, Guhl '251 teaches urging a plurality of grooved lineals onto the edges of the glass unit but is silent as to this taking place substantially concurrently. It would have

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been obvious to the skilled artisan to urge the lineals of Guhl '783 in view of Guhl '251 onto the edges of the glass unit substantially concurrently because such is known in the art, as taught by Crandell (Figures 4a-d; column 5, line 64 – column 6, line 10).

Regarding claims 6-14, Guhl '783 in view of Guhl '251 teaches all the limitations.

Regarding claims 15-16, the skilled artisan would have appreciated that bowing of the mid portions would be a result of the amount of pressure applied during the urging of the lineals onto the glass unit wherein an amount of pressure sufficient to cause such bowing is well within the purview of the skilled artisan so as to ensure that the edges of the glass unit are secured within the grooves of the lineals.

### ***Response to Arguments***

14. Applicant's arguments with respect to claim 4 have been considered but are moot in view of the new ground(s) of rejection.

15. The examiner would like to address one argument that was raised on p. 7-8 of the remarks with respect to the Guhl '783 reference and it teaching away from a glass unit, as claimed in the present invention, since the reference teachings eliminating and spacer and inserting the individual glass panes into the sash.

Applicant appears to believe that the present claim language ("glass unit") limits the claimed invention to at least two panes of glass that are preassembled before being inserted into the grooved lineal. The examiner respectfully points out that this interpretation is not commensurate with the scope of the claimed invention – Applicant's claimed "glass unit" could be a single glass pane. Regardless, the examiner would like to point out that only the prior art

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cited by Guhl '783 in the background section of the reference is being relied upon in the present action.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Jessica L. Rossi** whose telephone number is **571-272-1223**. The examiner can normally be reached on M-F (8:00-5:30) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard D. Crispino can be reached on 571-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**JESSICA ROSSI  
PRIMARY EXAMINER**

